



State of Utah

Department of
Environmental Quality

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DIVISION OF AIR QUALITY
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DAQE-IN1277005-04

August 10, 2004

G. Chris Buckner
Utah Air National Guard
151 ARG/EMB
756 N. 2200 W.
Salt Lake City, Utah 84116

Dear Mr. Buckner:

Re: Intent to Approve: Modify Approval Order DAQE-AN1277004-03 to Replace Generators, Salt Lake County, CDS B; NA; MAINT
Project Code: N1277-005

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:NM:jc

cc: Salt Lake Valley Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modify Approval Order DAQE-
AN1277004-03 to Replace Generators**

Prepared By: Nando Meli, Engineer
(801) 536-4052
Email: nmeli@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN1277005-04

Date: August 10, 2004

Utah Air National Guard

Source Contact
G. Chris Buckner
(801) 245-2122

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

Utah Air National Guard (UTANG) submitted a Notice of Intent to replace a 200-kilowatt (kW) generator and a 20 kW generator with a new 350 kW generator. The new generator will operate within the 12-month rolling limit established in the AO DAQE-AN1277004-03 dated August 21, 2003, which limits the hours of operation that the generators on site can operate. Therefore, there are no emissions increases as a result of the modification. The source is located in Salt Lake City, which is a non-attainment area of the National Ambient Air Quality Standards (NAAQS) for PM₁₀ and SO₂, and a maintenance area for CO and ozone. New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Available Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act does not apply to this source. The emissions, in tons per year, will not increase and will remain the same as permitted in the AO (DAQE-AN1277004-03): PM₁₀ 1.26, NO_x 21.00, SO₂ 1.53, CO 19.00, VOC 28.90, and HAPs 5.93.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Salt Lake Tribune and Deseret News on August 15, 2004. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This Approval Order (AO) applies to the following company:

Site Office and Site Location

Utah Air National Guard
765 North 2200 West
Salt Lake City, Utah 84116-2999

Telephone Number (801) 595-2157
Fax Number (801) 595-2178

The equipment listed in this AO shall be operated at the following location:

765 North 2200 West, Salt Lake City

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,515.5 kilometers Northing; 419.3 kilometers Easting; Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.
5. All records referenced in this AO which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for the following minimum periods:
 - A. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
 - B. All other records Two years
6. Utah Air National Guard (UTANG) shall install and operate 350 kilowatt (kW) generator and shall conduct its operations of the generators, jet engine test cell, and other miscellaneous air/ground equipment in accordance with the terms and conditions of this AO, which was written pursuant to UTANG's Notice of Intent submitted to the Division of Air Quality (DAQ) on July 21, 2004.
7. This AO shall replace the AO (DAQE-AN1277004-03) dated August 21, 2003.
8. The approved installations shall consist of the following equipment or equivalent*:
 - A. Diesel generators under 400 kW
 - B. Storage Tanks
 - Six-fixed roof tanks under 19,000 gallons**
 - One unleaded gasoline tank rated at 10,000 gal.
 - One propylene tank rated at 10,000 gal.
 - One JP-8 tank rated at 2,500 gal.
 - One JP-8 tank rated at 2,000 gal.
 - One #2 diesel tank rated at 250 gal., and
 - One #2 diesel tank rated at 10,000 gal.
 - Two cone/floating pan roof tanks over 19,000 gallons
 - One JP-8 tank rated at 94,228 gal.
 - One JP-8 tank rated at 314,000 gal.
 - C. Two paint booths with dry filter pads

- D. Exhaust stack for the jet engine test cell
- E. Thirteen parts cleaners
- F. Two self-contained filtration/collection bead blasting units
- G. One cyclone
- H. One bearing cleaning operation
- I. Miscellaneous Aerospace Ground Equipment (AGE) (gasoline, diesel, and JP-8 fired skid and wheel mounted equipment necessary for support of aircraft)
- J. Boiler

Fuel Type	Natural Gas, Diesel Propane
Type of Burner:	40 ppm NO _x
Heating Capacity:	5.4 x 10 ⁶ Btu/hr
- K. Emergency Generator

Fuel Type	Diesel, Natural Gas, Propane
Electrical Output:	3500 kW

* Equivalency shall be determined by the Executive Secretary.

** This equipment is listed for informational purposes only.

9. UTANG shall notify the Executive Secretary in writing when the installation of the 350 kW generator listed in Condition #8.A. has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke the AO in accordance with R307-401-11.

Limitations and Tests Procedures

10. Visible emissions from the following emission points shall not exceed the following values:
 - A. All paint booth exhaust stacks - 5% opacity
 - B. All AGE equipment - 20% opacity
 - C. All diesel generator – 20% opacity
 - D. Other stationary or fugitive emission points on base - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

11. The paint spray booths shall be equipped with paint arrestor particulate filters or equivalent to control particulate emissions. All air exiting the booths shall pass through the filters before being vented to the atmosphere.

12. The following production and/or consumption limits shall not be exceeded:

A. Jet Engine Test Cell

Engine testing shall not exceed the following durations per rolling 12-month period.

- | | | |
|----|-----------------------|----------------|
| 1) | Idle setting: | 10,600 minutes |
| 2) | Intermediate setting: | 5,250 minutes |
| 3) | Military setting: | 2,700 minutes |

B. Emergency Generators

The base-wide total of energy produced by emergency generators shall not exceed 173,250 kilowatt-hours (kW-hr) per rolling 12-month period.

- C. Paint booth usage per rolling 12-month period will be limited to the following quantities:

Vehicle maintenance booth:

- | |
|---|
| 1,500 gallons of paint |
| 2,500 gallons combined total of thinners and miscellaneous solvents |

Structural maintenance booth:

- | |
|---|
| 1,160 gallons of paint |
| 2,375 gallons combined total of thinners and miscellaneous solvents |

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of consumption and hours of operation shall be kept for all periods when the UTANG site is in operation. Engine testing durations shall be determined by records of minutes operated at idle, intermediate, and military settings. Hours of operation of emergency generators shall be determined by supervisor monitoring and maintaining of an operations log. Consumption of paint and solvent usage shall be determined by booth consumption records. All records shall be kept on a monthly basis.

Fuels

13. The owner/operator shall use only natural gas, propane, #1 or #2 fuel oil, and JP-8 as primary fuels.
14. The sulfur content of any fuel oil or diesel burned shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent.

Volatile Organic Compound (VOC) and Hazardous Air Pollutants (HAPs) Limitations

15. The VOC content of the paint as used in the booth shall not exceed the density limits established by R307-340. High solids (low VOC content) paints shall not be thinned or otherwise reduced beyond manufacturers recommendations. These parameters shall be tested by using the appropriate ASTM method or another method approved by the Executive Secretary.
16. The plant-wide emissions of VOCs and HAPs from the paint booths shall not exceed:

4.93 tons per rolling 12-month period for VOCs

3.16 tons per rolling 12-month period for all HAPs

Compliance with each/the limitation shall be determined on a rolling 12-month total. Based on the twentieth day of each month, a new 12-month total shall be calculated using data from the previous 12 months.

The VOC and HAP emissions shall be determined by maintaining a record of VOC and HAP emitting materials used each month. The record shall include the following data for each material used:

- A. Name of the VOC and HAPs emitting material, such as: paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
- B. Density of each material used (pounds per gallon)
- C. Percent by weight of all VOC and HAP in each material used
- D. Gallons of each VOC and HAP emitting material used
- E. The amount of VOC and HAP emitted monthly by each material used shall be calculated by the following procedure:

$$\text{VOC} = \frac{\% \text{ VOC by Weight}}{(100)} \times [\text{Density } \frac{(\text{lb})}{(\text{gal})}] \times \text{Gal Consumed} \times 1 \frac{\text{ton}}{2000 \text{ lb}}$$

$$\text{HAP} = \frac{\% \text{ HAP by Weight}}{(100)} \times [\text{Density } \frac{(\text{lb})}{(\text{gal})}] \times \text{Gal Consumed} \times 1 \frac{\text{ton}}{2000 \text{ lb}}$$

- F. The amount of VOC or HAP emitted monthly from all materials used.
- G. The amount of VOCs or HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC or HAP emissions.
17. All volatile raw materials shall be stored in tightly sealed containers.

Records & Miscellaneous

18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.
19. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
20. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include emissions from equipment listed in Condition #8. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for UTANG are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	1.26
B.	SO ₂	1.53
C.	NO _x	21.00
D.	CO	19.00
E.	VOC	28.90
F.	HAPs	5.93

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Rusty Ruby, Manager
New Source Review Section